

Contains No CBI



RHÔNE-POULENC INC.

CN 7500, CRANBURY, NJ 08512-7500
TELEPHONE: (609) 395-8300

10/16/92 AM 9:28

(A)

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October 16, 1992

**CERTIFIED MAIL
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Document Processing Center (TS-790)
Attn: Section 8(e) Coordinator (CAP Agreement)
Office of Toxic Substances
Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

RE: Report Submitted Pursuant to the TSCA Section 8(e) Compliance Audit Program

CAP ID NO.: 8ECAP - 0004

RP CAP REPORT NO.: RPS - 0365

Dear Sir/Madam:

On behalf of Rhône-Poulenc Inc. (RPI, CN5266, Princeton, NJ 08543-5266) and its subsidiaries, the attached report is being submitted to the Environmental Protection Agency (EPA) pursuant to the Toxic Substances Control Act (TSCA) Section 8(e) Compliance Audit Program (CAP Agreement) executed by RPI and EPA (8ECAP - 0004).

The title of the enclosed report is:

Toxicology Laboratory Report T-1861

This report is being submitted under Section 8(e) CAP because the following products were found to be corrosive to intact skin.

Chemical Identity: Aluminum chloride
CAS Registry No: 7446-70-0
CAS Registry Name: Aluminum chloride

Chemical Identity: Sodium hydrosulfide
CAS Registry No: 16721-80-5
CAS Registry Name: Sodium sulfide

Chemical Identity: Sodium orthosilicate/sodium sesquisilicate
CAS Registry No: 1344-09-8
CAS Registry Name: Silicic acid, sodium salt

Chemical Identity: Zirconium tetrachloride
CAS Registry No: 10026-11-6
CAS Registry Name: Zirconium chloride

1
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9/18

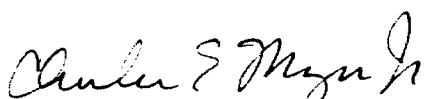
RPI does not claim any portion of the information in this submission to be TSCA confidential business information (TSCA CBI).

RPI has not previously submitted any TSCA Section 8(e) notices or premanufacture notification on the subject chemical substances.

In total, RPI is submitting three copies of the enclosed report and this cover letter: an original and two copies.

Further questions regarding this submission may be directed to Dr. Glenn S. Simon, Director of Toxicology at (919)549-2222 (Rhône-Poulenc, P.O. Box 12014, 2 T.W. Alexander Drive, Research Triangle Park, NC 27709).

Sincerely,



Charles E. Moyer, Jr., Ph.D.
Director, Product Safety
(609)860-3589

CONFIDENTIAL
TOXICOLOGY REQUEST FORM

T-No. 1861

Project No. 70-0110

26 Industrial compounds

Compound BORAX DECAHYDRATE
LISTED ON TABLE #2.

Date 12-6-71

Identification (lot, batch, etc.) R G

Use (insect., herbicide, etc.) Industrial

STRUCTURE

Purity (%) _____

by (IR, m.p., etc) _____

Known Impurities _____

Complete for formulations:

Per cent technical _____
solvent _____
per cent _____

Check and Complete:

- Acute oral toxicity - species _____
 Acute dermal toxicity - rabbits
 Primary skin irritation (Industrials) - rabbits
 Acute eye irritation - rabbits
 Other (specify) _____

Report Distribution _____

Remarks _____

STAUFFER CHEMICAL COMPANY
WESTERN RESEARCH CENTER

COMPANY CONFIDENTIAL

TOXICOLOGY LAB REPORT -- T-1861

May 18, 1972

SODIUM HEXAMETAPHOSPHATE, POWDERED

I. OBJECTIVE

To evaluate the skin irritation properties of sodium hexametaphosphate, powdered.

II. MATERIALS

Sodium hexametaphosphate, powdered was received from the Industrial Chemical Division on April 28, 1972.

III. SUMMARY

Skin irritation index and classification:	1.62 mild irritant.
----------------------------------------------	------------------------

IV. PROCEDURES

Skin Irritation Index, Draize Dermal

The Draize Dermal procedure was followed as outlined in the Code of Federal Regulations (Part 191.11, Chap. 1, Title 21) for evaluating hazardous substances. The test procedure is designed to determine whether a chemical is a primary skin irritant, ie., capable of initiating an extreme tissue reaction or skin inflammation to an insult or injury. The inflammatory process may vary from a barely perceptible hyperemia, to edema formation and vesication, and finally to an intense suppurative process. Irritation itself is not directly measured, but the result or consequence of irritation, that is, the injury reaction following irritation.

The Draize Dermal test is further discussed in Appendix A.

V. RESULTS

Skin Irritation Index, Draize Dermal

See chart on page 3.

Submitted by C. H. Bullock
C. H. Bullock

Approved by F. X. Kamienski
F. X. Kamienski

FXK:ea

0

RABBIT NO.

Expos.		8M	15M	16M	32F	33F	34F	
Time Hrs.	ERYTHEMA	Score	Score	Score	Score	Score	Score	Means
24	Intact	0	0	0	1	0	0	0.17
72	Intact	0	0	0	0	0	2	0.33
24	Abraded	2	2	4	1	3	4	2.66
72	Abraded	1	1	2	0	0	1	0.83
								SUBTOTAL 3.99
EDEMA								
24	Intact	0	0	0	0	0	0	0
72	Intact	0	0	0	0	0	0	0
24	Abraded	1	1	4	1	2	4	2.17
72	Abraded	0	0	1	0	0	1	0.33
								SUBTOTAL 2.50
								TOTAL SCORE 6.49
								(TOTAL /4) PRIM. IRIT. INDEX 1.62
MILD IRRITANT								

APPENDIX A

DESCRIPTION OF THE DRAIZE DERMAL SKIN IRRITATION TEST

The Draize dermal method of testing primary irritant substances is described in the Code of Federal Regulations under the Federal Hazardous Substances Labeling Act, Part 191.11, Chapter 1, Title 21 as follows:

Primary irritation to the skin is measured by a patch-test technique on the abraded and intact skin of the albino rabbit, clipped free of hair. A minimum of six subjects are used in abraded and intact skin tests. Introduce under a square patch such as surgical gauze measuring 1 inch x 1 inch, two single layers thick, 0.5 milliliter (in case of liquids) or 0.5 gram (in the case of solids and semisolids) of the test substance. Dissolve solids in an appropriate solvent and apply the solution as for liquids. The animals are immobilized with patches secured in place by adhesive tape. The entire trunk of the animal is then wrapped with an impervious material such as rubberized cloth for the 24-hour period of exposure. This material aids in maintaining the test patches in position and retards the evaporation of volatile substances. After 24 hours of exposure, the patches are removed and the resulting reactions are evaluated on the basis of the designated values in the following table:

Evaluation of skin reactions	Value ¹
Erythema and eschar formation:	
No erythema.....	0
Very slight erythema (barely perceptible).....	1
Well-defined erythema.....	2
Moderate to severe erythema.....	3
Severe erythema (beet redness) to slight eschar formation (injuries in depth).....	4
Edema formation:	
No edema.....	0
Very slight edema (barely perceptible).....	1
Slight edema (edges of area well defined by definite raising).....	2
Moderate edema (raised approximately 1 millimeter).....	3
Severe edema (raised more than 1 millimeter and extending beyond the area of exposure).....	4

¹ The "value" recorded for each reading is the average value of the six or more animals subject to the test.

Readings are again made at the end of a total of 72 hours (48 hours after the first reading). An equal number of exposures are made on areas of skin that have been previously abraded. The abrasions are minor incisions through the stratum corneum, but not sufficiently deep to disturb the derma or to produce bleeding. Evaluate the reactions of the abraded skin at 24 hours and 72 hours, as described in this paragraph. Add the values for erythema and Eschar formation at 24 hours and at 72 hours for intact skin to the values on abraded skin at 24 hours and at 72 hours (four values). Similarly, add the values for edema formation at 24 hours and at 72 hours for intact and abraded skin (four values). The total of the eight values is divided by four to give the primary irritation score. Example:

	Exposure time	Exposure unit
Erythema and eschar formation:		
Intact skin.....	24	2
Do.....	72	1
Abrasied skin.....	24	3
Do.....	72	2
Subtotal.....		8
Edema formation:		
Intact skin.....	24	0
Do.....	72	1
Abrasied skin.....	24	1
Do.....	72	2
Subtotal.....		4
Total.....		12

Primary irritation score is $12+4=3$.

Compounds producing combined averages (primary irritation indexes) of 2 or less are only mildly irritating; whereas those with indexes from 2 to 5 are moderate irritants, and those with scores above 5 are considered severe or primary irritants.

STAUFFER CHEMICAL COMPANY
WESTERN RESEARCH CENTER

COMPANY CONFIDENTIAL

TOXICOLOGY LAB REPORT T-1861

March 27, 1972

I. OBJECTIVE

To evaluate the skin irritation properties of twenty-five industrial compounds after a 4- and 24-hour exposure using the Draize dermal procedure.

II. PROCEDURES

The Draize dermal procedure is outlined in Appendix A. If the materials were corrosive (scores of 6.0 or greater) after a 24-hour exposure period, then the skin irritation properties were evaluated after a 4-hour exposure.

III. SUMMARY

See next page.

IV. RESULTS

Attached.

III. SUMMARY

Compound	4-Hr. Draize Index	24 Hr. Draize Index	Skin Irritant Classification
1. ALUMINUM CHLORIDE	6.0	-	Corrosive 7446-70-0
2. ALUMINUM FLUORIDE	-	0.25	Mild 7784-18-1
3. BORAX	-	0.58	Mild 1303-96-4
4. BORIC ACID	-	0.50	Mild 11113-50-1
5. BORON OXIDE	-	0.71	Mild 1303-86-2
6. DICALCIUM PHOSPHATE	-	0.00	Non Unknown
7. DIPOTASSIUM PHOSPHATE	-	1.79	Mild 7758-11-4
8. DISODIUM PHOSPHATE	-	2.25	Moderate 7758-79-4
9. FERRIC ORTHOPHOSPHATE	-	0.38	Mild Unknown
10. INSOLUBLE SODIUM META-PHOSPHATE	-	0.38	Mild 7785-84-4
11. MONOSODIUM PHOSPHATE	-	0.62	Mild 7558-80-7
12. POTASSIUM SILICATE	-	1.83	Mild 10006-28-7
13. SODIUM ACID PYROPHOSPHATE	-	2.58	Moderate Unknown
14. SODIUM GLUCONATE	-	0.00	Non 527-07-1
15. SODIUM HYDROSULFIDE	6.58	5.46	Corrosive 16721-80-5
16. SODIUM HYPOPHOSPHATE	-	0.00	Non 13721-43-2
17. SODIUM ORTHOSILICATE	8.0	8.00	Corrosive 13472-30-
18. SODIUM SESQUISILICATE	8.0	8.00	Corrosive 1344-09-9
19. SODIUM SULFITE	-	0.50	Mild 7757-83-7
20. SODIUM THIOSULFATE ANHYDROUS	-	0.38	Mild 7772-98-7
21. SODIUM THIOSULFATE PENTA-HYDRATE	-	0.38	Mild 7772-98-7
22. SODIUM TRIMETAPHOSPHATE	-	0.00	Non 7758-29-4
23. TRICALCIUM PHOSPHATE	-	0.00	Non 7758-87-4
24. TRIMAGNESIUM PHOSPHATE	-	0.00	Non 7757-87-1
25. ZIRCONIUM TETRACHLORIDE	6.92	6.63	Corrosive 10026-11-6

APPENDIX A

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Evaluation of skin reactions	Value ¹
Erythema and eschar formation:	
No erythema.....	0
Very slight erythema (barely perceptible).....	1
Well-defined erythema.....	2
Moderate to severe erythema.....	3
Severe erythema (beet redness) to slight eschar formation (injuries in depth).....	4
Edema formation:	
No edema.....	0
Very slight edema (barely perceptible).....	1
Slight edema (edges of area well defined by definite raising).....	2
Moderate edema (raised approximately 1 millimeter).....	3
Severe edema (raised more than 1 millimeter and extending beyond the area of exposure).....	4

¹The "value" recorded for each reading is the average value of the six or more animals subject to the test.

Readings are again made at the end of a total of 72 hours (48 hours after the first reading). An equal number of exposures are made on areas of skin that have been previously abraded. The abrasions are minor incisions through the stratum corneum, but not sufficiently deep to disturb the derma or to produce bleeding. Evaluate the reactions of the abraded skin at 24 hours and 72 hours, as described in this paragraph. Add the values for erythema and Eschar formation at 24 hours and at 72 hours for intact skin to the values on abraded skin at 24 hours and at 72 hours (four values). Similarly, add the values for edema formation at 24 hours and at 72 hours for intact and abraded skin (four values). The total of the eight values is divided by four to give the primary irritation score. Example:

	Exposure time	Exposure unit
Erythema and eschar formation:		
Intact skin.....	Hours 24	Value 2
Do.....	72	1
Abraded skin.....	24	3
Do.....	72	2
Subtotal.....		4
Edema formation:		
Intact skin.....	Hours 24	0
Do.....	72	1
Abraded skin.....	24	1
Do.....	72	2
Subtotal.....		4
Total.....		12

Primary irritation score is $12+4=3$.

Compounds producing combined averages (primary irritation indexes) of 2 or less are only mildly irritating; whereas those with indexes from 2 to 5 are moderate irritants, and those with scores above 5 are considered severe or primary irritants.

T-1861-1

ALUMINUM CHLORIDE

4 Hour Exposure

RABBIT NO.

T-1861-2

ALUMINUM FLUORIDE

24 Hour Exposure

RABBIT NO.

T-1861-3

BORAX

24 Hour Exposure

RABBIT NO.

T-1861-4

BORIC ACID

24 Hour Exposure

RABBIT NO.

T-1861-5

BORON OXIDE

24 Hour Exposure

RABBIT NO.

T-1861-6

DICALCIUM PHOSPHATE

24 Hour Exposure

RABBIT NO.

T-1866-7

DIPOTASSIUM PHOSPHATE

24 Hour Exposure

RABBIT NO.

T-1866-8

DISODIUM PHOSPHATE

24 Hour Exposure

RABBIT NO.

T-1866-9

FERRIC ORTHOPHOSPHATE

24 Hour Exposure

RABBIT NO.

T-1866-10

INSOLUBLE SODIUM METAPHOSPHATE

24 Hour Exposure

RABBIT NO.

T-1866-12

POTASSIUM SILICATE

24 Hour Exposure

RABBIT NO.

Expos. Time Hrs.	ERYTHEMA	8 M Score	9 M Score	10 M Score	26 F Score	27 F Score	28 F Score	Means
24	Intact	2	3	0	2	0	2	1.50
72	Intact	0	0	0	0	0	0	0.00
24	Abraded	3	3	3	.3	2	4	3.00
72	Abraded	3	0	0	0	0	3	1.00
								SUBTOTAL
	EDEMA							5.50
24	Intact	1	1	0	0	0	1	0.50
72	Intact	0	0	0	0	0	0	0.00
24	Abraded	2	1	1	1	1	2	1.33
72	Abraded	1	0	0	0	0	0	0.17
								SUBTOTAL
								2.00
								TOTAL SCORE
								7.50
								(TOTAL /4) PRIM. IRIT. INDEX
								1.88
	MILD IRRITANT							

T-1866-14

SODIUM GLUCONATE

24 Hour Exposure

RABBIT NO.

Expos. Time Hrs.	ERYTHEMA	11 M Score	12 M Score	13 M Score	29 F Score	30 F Score	31 P Score	Means
24	Intact	0	0	0	0	0	0	0.00
72	Intact	0	0	0	0	0	0	0.00
24	Abraded	0	0	0	.0	0	0	0.00
72	Abraded	0	0	0	0	0	0	0.00
							SUBTOTAL	0.00
	EDEMA							
24	Intact	0	0	0	0	0	0	0.00
72	Intact	0	0	0	0	0	0	0.00
24	Abraded	0	0	0	0	0	0	0.00
72	Abraded	0	0	0	0	0	0	0.00
							SUBTOTAL	0.00
							TOTAL SCORE	0.00
							(TOTAL /4) PRIM. IRIT. INDEX	0.00
							NON-IRRITANT	

SODIUM HYDROSULFIDE

4 Hour Exposure.

RABBIT NO.

T-1866-15

SODIUM HYDROSULFIDE

RABBIT NO. 24 Hour Exposure

T-1866-16

SODIUM HYPOPHOSPHATE

24 Hour Exposure

RABBIT NO.

SODIUM ORTHOSILICATE

RABBIT NO. 4 Hour Exposure

T-1866-

SODIUM ORTHOSILICATE

RABBIT NO. 24 Hour Exposure

SODIUM SESQUISILICATE

RABBIT NO. 4 Hour Exposure

T-1866-

Expos. Time Hrs.		4 M ERYTHEMA Score	5 M Score	6 M Score	22 F Score	23 F Score	24 F Score	Means
4	Intact	4	4	4	4	4	4	4.00
52	Intact	4	4	4	4	4	4	4.00
4	Abraded	4	4	4	4	4	4	4.00
52	Abraded	4	4	4	4	4	4	4.00
								SUBTOTAL 16.00
	EDEMA							
4	Intact	4	4	4	4	4	4	4.00
52	Intact	4	4	4	4	4	4	4.00
4	Abraded	4	4	4	4	4	4	4.00
52	Abraded	4	4	4	4	4	4	4.00
								SUBTOTAL 16.00
								TOTAL SCORE 32.00
								(TOTAL /4) PRIM. IRIT. INDEX 8.00
	CORROSIVE							

SODIUM SESQUISILICATE

RABBIT NO. 24 Hour Exposure

Expos. Time Hrs.		14 M ERYTHEMA Score	15 M Score	16 M Score	32 F Score	33 F Score	34 F Score	Means
24	Intact	4	4	4	4	4	4	4.00
72	Intact	4	4	4	4	4	4	4.00
24	Abraded	4	4	4	4	4	4	4.00
72	Abraded	4	4	4	4	4	4	4.00
								SUBTOTAL 16.00
	EDEMA							
24	Intact	4	4	4	4	4	4	4.00
72	Intact	4	4	4	4	4	4	4.00
24	Abraded	4	4	4	4	4	4	4.00
72	Abraded	4	4	4	4	4	4	4.00
								SUBTOTAL 16.00
								TOTAL SCORE 32.00
								(TOTAL /4) PRIM. IRIT. INDEX 8.00
	CORROSIVE							

T-1866-19

SODIUM SULFITE

24 Hour Exposure

RABBIT NO.

T-1866-20

SODIUM THIOSULFATE, ANHYDROUS24 Hour Exposure

RABBIT NO.

Expos. Time Hrs.	ERYTHEMA	14 M Score	15 M Score	16 M Score	32 F Score	33 F Score	34 F Score	Means
24	Intact	0	0	0	0	1	0	0.17
72	Intact	0	0	0	0	0	0	0.00
24	Abraded	2	1	2	1	1	1	1.33
72	Abraded	0	0	0	0	0	0	0.00
							SUBTOTAL	1.50
	EDEMA							
24	Intact	0	0	0	0	0	0	0.00
72	Intact	0	0	0	0	0	0	0.00
24	Abraded	0	0	0	0	0	0	0.00
72	Abraded	0	0	0	0	0	0	0.00
							SUBTOTAL	0.00
							TOTAL SCORE	1.50
							(TOTAL /4) PRIM. IRIT. INDEX	0.38
	MILD IRRITANT							

T-1866-21

SODIUM THIOSULFATE, PENTAHYDRATE

24 Hour Exposure

RABBIT NO.

T-1866-22

SODIUM TRIMETAPHOSPHATE

24 Hour Exposure

RABBIT NO.

T-1866-23

TRICALCIIUM PHOSPHATE

24 Hour Exposure

RABBIT NO.

T-1866-24

TRIMAGNESIUM PHOSPHATE

24 Hour Exposure

RABBIT NO.

ZIRCONIUM TETRACHLORIDE

4 Hour Exposure
RABBIT NO. T-1866-25

AIRCONIUM TETRACHLORIDE

RABBIT NO. 24 Hour Exposure

Work done by: A. Hall
C. H. Bullock
J. F. Saylor

Submitted by J. F. Saylor
J. F. Saylor

Approved by F. X. Kamienski
F. X. Kamienski

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DERMAL TOXICITY

Operator S. M. C. Starting Date 5-2-72 T No. 1861
 Compound Sodium Hexametaphosphate Powdered
 Concentration As rec'd Dosage 0.5 gm
 Solvent None PH _____
 Experimental Design 24 hrs exposure

Rab. No.	Body Wt. Kg.	Time Dosed	Expos. Time Hrs.	ERYTHEMA	RABBIT NO. 8 15 16 32 31 32						Mean
					Score	Score	Score	Score	Score	Score	
8	2000	10 ⁵⁰ A	24	Intact	0	0	0	1	0	0	0.1
15	2000	10 ⁵² A	72	Intact	0	0	0	0	0	0	0.3
16	1950	11 ⁰³ A	24	Abraded	2	2	4	1	3	4	2.6
32	1900	11 ⁰⁵ A	72	Abraded	1	1	2	0	0	1	0.8
31	1850	11 ¹⁴ A									3.9
32	2110	11 ²⁰ A		EDEMA							
	Term Wt. Kg.		24	Intact	0	0	0	0	0	0	0
			72	Intact	0	0	0	0	0	0	0
			24	Abraded	1	1	4	1	2	4	2.1
			72	Abraded	0	0	1	0	0	0	0.3
											2.8
											6.4
					(TOTAL /4) PRIM. IRIT. INDEX						1.6
				mild.							

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DERMAL TOXICITY Rabbit

Operator JG, CB Starting Date 3-13-72 T No. 1861-1
Compound Aluminum Chloride, anhydrous
Concentration as rec'd Dosage 0.5 gm
Solvent None PH
Experimental Design 4 hrs exposure

2 CONFIDENTIAL

DERMAL TOXICITY

Operator K. Orl. CB Starting Date 3-7-72 T No. 1861
Compound Aluminum fluoride
Concentration as rec'd Dosage 0.5 gm
Solvent None PH
Experimental Design 24 hrs

RABBIT NO.

CONFIDENTIAL

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DERMAL TOXICITY

Operator K. G. B., CB Starting Date 3-7-72 T No. 1861
Compound Boron Oxide
Concentration As rec'd Dosage 0.5 gm
Solvent None PH
Experimental Design X has

#6

~~CONFIDENTIAL~~

DERMAL TOXICITY

Operator K. Glad. CR Starting Date 8-9-72 T No. T-1861
Compound Dicalcium Phosphate
Concentration as rec'd Dosage 0.5 gm
Solvent None PH 7.4
Experimental Design 24 hrs

Rab. No.	Body Wt. Kg.	Time Dosed	Expos. Time Hrs.	ERYTHEMA	Score	Score	Score	Score	Score	Score	Means
50	2100	1 ¹⁵ / ₁₀	24	Intact	○	○	○	○	○	○	○(0)
60	2200	1 ²⁴ / ₁₀	72	Intact	○	○	○	○	○	○	0
70	1900	1 ²⁹ / ₁₀	24	Abraded	○	○	○	○	○	○	2(2) 0
23	2000	1 ³⁵ / ₁₀	72	Abraded	○	○	○	○	○	○	0
24	2200	1 ⁴⁴ / ₁₀									SUBTOTAL 0
25	2500	1 ⁴⁷ / ₁₀		EDEMA							
	Term		24	Intact	○	○	○	○	○	○	0
	Wt. Kg.		72	Intact	○	○	○	○	○	○	0
			24	Abraded	○	○	○	○	○	○	0
			72	Abraded	○	○	○	○	○	○	0
											SUBTOTAL 0
											TOTAL SCORE 0
					(TOTAL /4)	PRIM. IRIT. INDEX					0

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CONFIDENTIAL

DERMAL TOXICITY Rabbit

Operator X, AD, PB Starting Date 3-9-72 T No. T-1861
 Compound Dipotassium Phosphate
 Concentration As rec'd Dosage 0.5 gm
 Solvent None PH _____
 Experimental Design 24 hrs

Rab. No.	Body Wt. Kg.	Time Dosed	Expos. Time Hrs.	RABBIT NO.							
				ERYTHEMA	5	6	7	23	34	35	Means
5d1			24	Intact	1	0	0	0	0	0	0.17
6d1			72	Intact	0	0	0	0	0	0	0
7d1			24	Abraded	1	2	1	3	3	4	2.33
8d1			72	Abraded	3	3	3	3	3	2	2.83
24d1										SUBTOTAL	5.33
25d1				EDEMA							
Term Wt. Kg.			24	Intact	0	0	0	0	0	0	0
				Intact	0	0	0	0	0	0	0
			24	Abraded	0	0	0	1	1	2	0.66
			72	Abraded	2	2	1	1	1	0	1.17
										SUBTOTAL	1.80
										TOTAL SCORE	7.16
										(TOTAL /4) PRIM. IRIT. INDEX	1.79
				mild							

8

CONFIDENTIAL

DERMAL TOXICITY Rabbit

Operator JS, GA, CB Starting Date 3-9-72 T No. J-1861

Compound Dissodium Phosphate

Concentration 0.5 mg/ml Dosage 0.5 gpm

Solvent *Note* _____ PH _____

Experimental Design

11

CONFIDENTIAL

DERMAL TOXICITY Rabbit

Operator K, Gil, CB Starting Date 3-9-72 T No. T-1861
 Compound Monosodium Phosphate
 Concentration as received Dosage 0.5 gm
 Solvent None PH _____
 Experimental Design 24 hrs

Rab. No.	Body Wt. Kg.	Time Dosed	Expos. Time Hrs.	RABBIT NO.							
				ERYTHEMA	8	9	10	26	27	28	Means
8 [♂]			24	Intact	0	0	0	0	0	0	0
9 [♂]			72	Intact	0	0	0	0	0	0	0
10 [♂]			24	Abraded	1	2	3	2	2	1	1.83
26 [♀]			72	Abraded	0	0	0	0	0	2	0.33
27 [♀]											SUBTOTAL 2.16
28 [♀]				EDEMA							
Term Wt. Kg.			24	Intact	0	0	0	0	8	8	0
			72	Intact	0	0	0	0	8	8	0
			24	Abraded	0	0	1	0	1	0	0.33
			72	Abraded	0	0	0	C	C	0	0
											SUBTOTAL 0.33
											TOTAL SCORE 2.49
					(TOTAL /4) PRIM. IRIT. INDEX 0.62						
				mild							

12

CONFIDENTIAL

DERMAL TOXICITY Rabbit

Operator K. RD, JB Starting Date 3-9-72 T No. T-1861
 Compound Potassium Silicate
 Concentration 0.5% w/v Dosage 0.5 gm
 Solvent None PH _____
 Experimental Design 24 hrs

RABBIT NO.													
Rab. No.	Body Wt. Kg.	Time Dosed	Expos. Time Hrs.	ERYTHEMA	8	9	10	16	21	28	Means		
8 ²¹			24	Intact	2	3	0	2	0	2	1.50		
9 ²¹			72	Intact	0	0	0	0	0	0	0		
10 ²¹			24	Abraded	3	3	3	3	2	4	3.00		
26 ⁹			72	Abraded	3	0	0	0	0	3	1.00		
27 ⁹											SUBTOTAL 5.50		
28 ⁹				EDEMA									
Term Wt. Kg.			24	Intact	1	1	8	8	0	1	0.50		
			72	Intact	0	0	8	8	0	0	0		
			24	Abraded	2	1	1	1	1	2	1.33		
			72	Abraded	1	0	0	0	0	0	0.17		
										SUBTOTAL	2.80		
										TOTAL SCORE	7.50		
										(TOTAL /4) PRIM. IRIT. INDEX	1.88		
										mild -			

1.88
1.50
+ 35
32/30

1.2
1.50
X 15

13

~~CONFIDENTIAL~~

DERMAL TOXICITY *Kaltit*

DERMAL TOXICITY Karen
Operator JK, AB, CB Starting Date 3-9-72 T No. T-1861
Compound Sodium Dodecyl Pyrophosphate
Concentration as received Dosage 0.5 g/200 ml
Solvent None PH
Experimental Design 24 hrs

RABBIT NO.										
Rab. No.	Body Wt. Kg.	Time Dosed	Expos. Time Hrs.	ERYTHEMA	Score	Score	Score	Score	Score	Mean:
8 ♂			24	Intact	1	0	0	0	0	0.17
9 ♂			72	Intact	0	0	0	0	0	0
10 ♂			24	Abraded	4	4	4	2	4	3.33
26 ♀			72	Abraded	4	4	4	0	0	2.00
27 ♀									SUBTOTAL	5.50
28 ♀				EDEMA						
	Term		24	Intact	0	0	0	0	0	0
	Wt. Kg.		72	Intact	0	0	0	0	0	0
			24	Abraded	4	4	4	1	3	2.83
			72	Abraded	4	4	4	0	0	2.00
									SUBTOTAL	4.83
									TOTAL SCORE	10.33
									(TOTAL /4) PRIM. IRIT. INDEX	2.58

14

CONFIDENTIAL

DERMAL TOXICITY *Kalbit*

Operator G. GWT, CB starting Date 3-9-72 T No. T-1861
Compound Sodium Gluconate
Concentration as rec'd Dosage 0.5 gm
Solvent None PH
Experimental Design 24 hrs

RABBIT NO.

15

CONFIDENTIAL
DERMAL TOXICITY Rabbit

Operator F. Gd, CB Starting Date 3-9-72 T No. T-1861
 Compound Sodium Hydrosulfide
 Concentration as rec'd Dosage 0.5 gm
 Solvent None 6-# PH
 Experimental Design 24 hrs

TRI-n-BUTYL-ANTIMONITEANAL.Dr. Lewis

CLASSIFICATION

RABBIT NO.

Rab. No.	Body Wt. Kg.	Time Dosed	Expos. Time Hrs.	ERYTHEMA	11	12	13	29	30	31	Means
11			24	Intact	2	2	2	4	4	0	2.33
12			72	Intact	3	3	2	4	4	0	2.88
13			24	Abraded	4	4	4	4	4	4	4.00
29			72	Abraded	4	4	4	4	4	4	4.00
30											SUBTOTAL 12.88
31				EDEMA							
			24	Intact	0	1	1	2	4	3	1.50
			72	Intact	0	1	0	1	2	0	0.66
			24	Abraded	4	4	4	4	2	4	3.66
			72	Abraded	3	2	2	4	3	4	3.00
											SUBTOTAL 8.82
											TOTAL SCORE 20.88
											(TOTAL /4) PRIM. IRIT. INDEX 5
											IRRITANT. 5.46

1.5
19.00
9.50

7/6.00

21
46.18 CD
70

CONFIDENTIAL

DERMAL TOXICITY Rabbitoperator JS, AB, CB Starting Date 3-13-72 T No. 1861-15Compound Sodium HydrosulfideConcentration As rec'd Dosage 0.5 mlSolvent None

PH

Experimental Design 4 hrs exposure

RABBIT NO.

Rab. No.	Body Wt. Kg.	Time Dosed	Expos. Time Hrs.	ERYTHEMA	2	3	4	20	21	22	Means
		12 ¹⁸	24	Intact	4	4	4	0	4	4	3.33
		12 ²²	72	Intact	4	4	2	0	4	4	3.00
		12 ¹⁶	24	Abraded	4	4	4	4	4	4	4.0
		12 ²¹	72	Abraded	4	4	4	4	4	4	4.00
		12 ²²									SUBTOTAL 15.33
		12 ²⁶		EDEMA							
Term Wt. Kg.		24		Intact	1	2	4	0	2	4	3.33
				Intact	2	1	2	0	1	2	1.33
		24		Abraded	4	4	2	4	4	4	3.66
		72		Abraded	3	3	3	4	4	4	3.66
											SUBTOTAL 11.98
											TOTAL SCORE 26.31
											(TOTAL /4) PRIM. IRIT. INDEX 6.58

Corrosive

11

$$\begin{array}{r} 1.17 \\ \times 6 \\ \hline 6.70 \\ -10 \\ \hline 110 \end{array}$$

2120

$$\begin{array}{r} 10.00 \\ \times 6 \\ \hline 60 \\ +40 \\ \hline 100 \\ -20 \\ \hline 80 \end{array}$$

17

CONFIDENTIAL

DERMAL TOXICITY

Rabbit

operator SS, GHD, CB Starting Date 3-9-72 T No. T-1861
 Compound Sodium Orthosilicate
 Concentration 0.5% w/v Dosage 0.5 gm
 Solvent None PH
 Experimental Design 34 hrs

RABBIT NO.

Rab. No.	Body Wt. Kg.	Time Dosed	Expos. Time Hrs.	ERYTHEMA	11	12	13	29	30	31	Means
11 ♂			24	Intact	4	4	4	4	4	4	4
12 ♂			72	Intact	4	4	4	4	4	4	4
13 ♂			24	Abraded	4	4	4	4	4	4	4
29 ♀			72	Abraded	4	4	4	4	4	4	4
30 ♀											SUBTOTAL 16
31 ♀				EDEMA							
	Term		24	Intact	4	4	4	4	4	4	4
	Wt. Kg.		72	Intact	4	4	4	4	4	4	4
			24	Abraded	4	4	4	4	4	4	4
			72	Abraded	4	4	4	4	4	4	4
											SUBTOTAL 16
											TOTAL SCORE 32
					(TOTAL /4)	PRIM.	IRIT.	INDEX			8
					Corrosive						

18

CONFIDENTIAL

DERMAL TOXICITY RabbitOperator K. A. CBStarting Date 3-9-72T No. I-1861Compound Sodium SesquicarbonateConcentration as receivedDosage 0.5 gmSolvent None

PH

Experimental Design 24 hrs

RABBIT NO.													
Rab. No.	Body Wt. Kg.	Time Dosed	Expos. Time Hrs.	ERYTHEMA	14	15	16	32	33	34	Mean		
44	200	3 ¹ / ₂	24	Intact	*4	4	4	4	4	4	4		
15	200	3 ¹ / ₂	72	Intact	4	4	4	4	4	4	4		
16	2300	3 ¹ / ₂	24	Abraded	4	4	4	4	4	4	4		
32	2100	3 ² / ₂	72	Abraded	4	4	4	4	4	4	4		
33	2800	3 ² / ₂											
SUBTOTAL											16		
34	2200	3 ¹ / ₂	24	EDEMA									
				Intact	*4	4	4	4	4	4	4		
			72	Intact	4	4	4	4	4	4	4		
				Abraded	4	4	4	4	4	4	4		
			72	Abraded	4	4	4	4	4	4	4		
SUBTOTAL											76		
TOTAL SCORE											32		
(TOTAL /4) PRIM. IRIT. INDEX											8		
<i>Corrosive</i>													

* All through the skin (corrosive)

DERMAL TOXICITY

DERMAL TOXICITY *Rabbit* CONFIDENTIAL

Operator 25, QM, CB Starting Date 3-13-70 T No. 1861-18
Compound Sodium Sesquicarbonate
Concentration 0.5 ecld Dosage 0.5 gm
Solvent None PH _____
Experimental Design 4 hrs exposure

19

CONFIDENTIAL

DERMAL TOXICITY

Rabbit

Operator DS, GAD, CB Starting Date 3-9-72 T No. T-1861
 Compound Sodium Sulfite
 Concentration as received Dosage 0.5 gm
 Solvent None PH _____
 Experimental Design 24 hrs

RABBIT NO.

Rab. No.	Body Wt. Kg.	Time Dosed	Expos. Time Hrs.	ERYTHEMA	14	15	16	32	33	34	Means
14 ♂			24	Intact	○	○	○	○	1	○	0.17
15 ♂			72	Intact	○	○	○	○	○	○	0
16 ♂			24	Abraded	2	1	2	3	1	1	1.66
30 ♀			72	Abraded	○	○	○	○	○	○	0
33 ♀											SUBTOTAL 1.83
34 ♀				EDEMA							
			24	Intact	○	○	○	○	○	○	0
			72	Intact	○	○	○	○	○	○	0
			24	Abraded	○	○	○	1	0	0	0.17
			72	Abraded	○	○	○	○	○	○	0
											SUBTOTAL 0.17
											TOTAL SCORE 2.00
					(TOTAL /4)	PRIM.	IRIT.	INDEX	0.50		
				mild							

20

CONFIDENTIAL

DERMAL TOXICITY Rabbit

Operator K. A. C.B. Starting Date 3-9-73 T No. T-1861
 compound Sodium Thiosulfate, Anhydrous
 Concentration As rec'd Dosage 0.5 gm
 Solvent None PH _____
 Experimental Design 24 hrs

RABBIT NO.											
Rab. No.	Body Wt. Kg.	Time Dosed	Expos. Time Hrs.	ERYTHEMA	14	15	16	32	33	34	Means
14 ^d			24	Intact	○	○	○	○	1	○	0.17
15 ^d			72	Intact	○	○	○	○	○	○	
16 ^d			24	Abraded	2	1	2	1	1	1	1.38
32 ^g			72	Abraded	○	○	○	○	○	○	
33 ^g											SUBTOTAL 1.50
34 ^f				EDEMA							
	Term Wt. Kg.	24		Intact	○	○	○	○	○	○	○
				Intact	○	○	○	○	○	○	○
		72		Abraded	○	○	○	○	○	○	
				Abraded	○	○	○	○	○	○	
											SUBTOTAL 0
											TOTAL SCORE 1.50
					(TOTAL /4) PRIM. IRIT. INDEX						0.38
				mild							

#22

CONFIDENTIAL

DERMAL TOXICITY Rabbit

Operator HS, QM, PB Starting Date 3-9-72 T No. T-1861

Compound Sodium Trimetaphosphate

Concentration 0.5 mg/ml Dosage 0.5 gm.

Solvent None PH _____

Experimental Design 24 hrs

RABBIT NO.

23

Pafford CONFIDENTIAL

DERMAL TOXICITY

Operator G, A., C.B Starting Date 3-9-72 T No. T-1861
Compound Tricalcium Phosphate
Concentration as received Dosage 0.5 gm
Solvent None PH 7
Experimental Design 24 hrs

RABBIT NO.

25

DERMAL TOXICITY Rabbit CONFIDENTIAL

Operator DJ, AS, CB Starting Date 3-9-72 T No. T-1861
 Compound Zirconium Tetrachloride
 Concentration As rec'd Dosage 0.5 gm
 Solvent None PH _____
 Experimental Design 24 hrs

RABBIT NO.

Rab. No.	Body Wt. Kq.	Time Dosed	Expos. Time Hrs.	ERYTHEMA	17	18	1	35	36	19	Mean
17 [♂]			24	Intact	4	4	4	4	4	4	4
18 [♂]			72	Intact	4	4	4	4	4	4	4
19 [♀]			24	Abraded	4	4	4	4	4	4	4
35 [♀]			72	Abraded	4	4	4	4	4	4	4
36 [♀]											SUBTOTAL 16
19 [♀]				EDEMA							
			24	Intact	2	1	0	3	1	2	1.50
			72	Intact	2	2	0	4	2	4	2.33
			24	Abraded	2	2	2	4	4	4	3.00
			72	Abraded	3	3	4	4	4	4	3.66
											SUBTOTAL 10.49
											TOTAL SCORE 26.49
											(TOTAL /4) PRIM. IRIT. INDEX 6.63
											STEROID IRITANT CORROSIVE

SEVERE DESTRUCTION

CONFIDENTIAL

DERMAL TOXICITY

Operator F.G.H.CB Starting Date 3-13-72 T No. 1861-25
 Compound Zirconium Tetrachloride
 Concentration as rec'd
 Solvent None Dosage 0.5 gm
 PH _____
 Experimental Design 4 hrs exposure X

RABBIT NO.											
Rab. No.	Body Wt.Kg.	Time Dosed	Expos. Time Hrs.	ERYTHEMA	7M Score	8M Score	9M Score	25F Score	26F Score	27F Score	Means
			24	Intact	4	4	4	4	4	4	4
			72	Intact	4	4	4	4	4	4	4
			24	Abraded	4	4	4	4	4	4	4
			72	Abraded	4	4	4	4	4	4	4
											16
				EDEMA							
Term Wt.Kg.			24	Intact	2	4	3	2	4	2	3.00
			72	Intact	2	2	2	1	2	3	2.00
			24	Abraded	4	4	4	3	2	4	3.50
			72	Abraded	4	4	4	3	2	2	3.17
											SUBTOTAL 11.67
											TOTAL SCORE 27.67
											(TOTAL /4) PRIM. IRIT. INDEX 6.92
											6.92

6.91
 4/27.67
 24
 36
 36

6.92
 4/27.67
 24
 30
 31

4 HR DZ DEF.

- #1 Aluminum Chloride
- #13 Sodium Acid Pyrophosphate
- #15 Sodium Hydrosulfide
- #17 Sodium Orthosilicate
- #18 Sodium Sesquisilicate
- #25 Zirconium Tetrachloride

#26 Sodium Hexametaiphosphate

10
13
103

- #7. Dipotassium phosphate
- #8. Disodium phosphate
- #12 Potassium Silicate

~~104~~

(NOT REC'D)

10124-56-8

Work done by: A. Hall

C.H. Bullock

J.F. Saylor

Submitted by

J.F. Saylor

Approved by

F.X. Kamienski

Stauffer CHEMICAL Company
Western Research Center
COMPANY CONFIDENTIAL

Toxicology LAB Report T-1861

March 29, 1972

I. OBJECTIVE

To evaluate the skin irritation properties of twenty-five industrial compounds ^{after a 4- and 24-hour exposure} using the DRAIZE dermal pro-

II. PROCEDURES

The DRAIZE dermal procedure is outlined in Appendix A. If the materials were corrosive ^(scores of 6.0 or greater) after a 24-hour exposure period, then the skin-irritation properties were evaluated after a 4-hour exposure.

III. SUMMARY

See next page.

IV. RESULTS

Attached.

T-1861-1

ALUMINUM CHLORIDE

4 Hour Exposure

RABBIT NO.

T-1861-2

ALUMINUM FLUORIDE

24 hour exposure

RABBIT NO.

T-1861-3

BORAX

24 hour exposure

RABBIT NO.

T-1861-4

BORIC Acid

24 hour exposure

RABBIT NO.

T-1861-5

Boron Oxide

24 hour exposure

RABBIT NO.

T-1861-6

Dicalcium Phosphate : 24 hour exposure

RABBIT NO.

T-1866-7

Dipotassium Phosphate

24 hour exposure

RABBIT NO.

T-1866-8

Disodium Phosphate

24 hours exposure

RABBIT NO.

Expos. Time Hrs.	ERYTHEMA	5M Score	6M Score	7M Score	23F Score	24F Score	25F Score	Means
24	Intact	1	1	0	0	0	0	0.33
72	Intact	0	0	0	0	0	0	0.00
24	Abraded	3	9	3	3	3	4	3.33
72	Abraded	3	3	3	3	3	2	2.83
							SUBTOTAL	6.49
	EDEMA							
24	Intact	0	0	0	0	0	0	0.00
72	Intact	0	0	0	0	0	0	0.00
24	Abraded	1	2	1	1	1	1	1.17
72	Abraded	2	1	2	1	1	1	1.33
							SUBTOTAL	2.50
							TOTAL SCORE	8.99
							(TOTAL /4) PRIM. IRIT. INDEX	2.25
							Moderate Irritant	

T-1866-9

Ferric Orthophosphate 24 hour exposure

RABBIT NO.

Expos. Time Hrs.	ERYTHEMA	5M Score	6M Score	7M Score	23F Score	24F Score	25F Score	Means
24	Intact	0	0	0	0	0	0	0.00
72	Intact	0	0	0	0	0	0	0.00
24	Abraded	0	0	0	2	2	1	0.83
72	Abraded	0	0	2	0	2	0	0.66
							SUBTOTAL	1.49
	EDEMA							
24	Intact	0	0	0	0	0	0	0.00
72	Intact	0	0	0	0	0	0	0.00
24	Abraded	0	0	0	0	0	0	0.00
72	Abraded	0	0	0	0	0	0	0.00
							SUBTOTAL	0.00
							TOTAL SCORE	1.49
				(TOTAL /4)	PRIM. IRIT. INDEX			0.38
				Mild Irritant				

T-1866-10

Insoluble Sodium Metaphosphate 24 hour exposure

RABBIT NO.

T-1866-11

Monosodium Phosphate

24 hour exposure

RABBIT NO.

T-1866-12

Potassium Silicate

24 hour exposure

RABBIT NO.

T-1866-13

Sodium Acid Pyrophosphate 24 hour exposure

RABBIT NO.

Expos. Time Hrs.	ERYTHEMA	8 M Score	9 M Score	10 M Score	26 F Score	27 F Score	28 F Score	Means
24	Intact	1	0	0	0	0	0	0.17
72	Intact	0	0	0	0	0	0	0.00
24	Abraded	4	4	4	2	4	2	3.33
72	Abraded	4	4	4	0	0	0	2.00
								SUBTOTAL 5.50
	EDEMA							
24	Intact	0	0	0	0	0	0	0.00
72	Intact	0	0	0	0	0	0	0.00
24	Abraded	4	4	4	1	3	1	2.83
72	Abraded	4	4	4	0	0	0	2.00
								SUBTOTAL 4.83
								TOTAL SCORE 10.33
								(TOTAL /4) PRIM. IRIT. INDEX 2.58
								Moderate Irritant

T-1866-14

Sodium Gluconate

24 hour exposure

RABBIT NO.

Sodium Hydrosulfide

4 hour exposure

T-1866-

RABBIT NO.

Expos. Time Hrs.	ERYTHEMA	11 M Score	12 M Score	13 M Score	29 F Score	30 F Score	31 F Score	Means
24 4	Intact	4	4	4	0	4	4	3.33
72 52	Intact	4	4	2	0	4	4	3.00
24 4	Abraded	4	4	4	4	4	4	4.00
72 52	Abraded	4	4	4	4	4	4	4.00

SUBTOTAL 14.33

	EDEMA							
24 4	Intact	4	4	4	0	4	4	3.33
72 52	Intact	2	1	2	0	1	2	1.33
24 4	Abraded	4	4	2	4	4	4	3.66
72 52	Abraded	4	3	3	4	4	4	3.66

SUBTOTAL 11.98

TOTAL SCORE 26.31

(TOTAL /4) PRIM. IRIT. INDEX 6.58

Corrosive

Sodium Hydro sulfide RABBIT NO. 24 hour exposure

Expos. Time Hrs.	ERYTHEMA	2 M Score	3 M Score	4 M Score	20 F Score	21 F Score	22 F Score	Means
24	Intact	2	2	2	4	4	0	2.33
72	Intact	3	3	2	4	4	0	2.66
24	Abraded	4	4	4	4	4	4	4.00
72	Abraded	4	4	4	4	4	4	4.00

SUBTOTAL

	EDEMA							
24	Intact	1	1	1	2	4	0	1.50
72	Intact	0	1	0	1	2	0	0.66
24	Abraded	4	4	4	4	2	4	3.66
72	Abraded	3	2	2	4	3	4	3.00

SUBTOTAL 8.82

TOTAL SCORE 21.81

(TOTAL /4) PRIM. IRIT. INDEX 5.46

Severe Irritant

T-1866-16

Sodium Hypo phosphate

24 hour exposure

RABBIT NO.

Sodium Orthosilicate

4 hour exposure

RABBIT NO.

T-1866-17

Sodium Orthosilicate

RABBIT NO. 24 hour exposure

Sodium Sesquicarbonate

4 hour Exposure

T-1866-18

Expos. Time Hrs.	ERYTHEMA	RABBIT NO.						Means
		4 M	5 M	6 M	22 F	23 F	24 F	
24	Intact	4	4	4	4	4	4	4.00
72	Intact	4	4	4	4	4	4	4.00
24	Abraded	4	4	4	4	4	4	4.00
72	Abraded	4	4	4	4	4	4	4.00

SUBTOTAL 16.00

	EDEMA							
		24	4	5	6	22	23	
24	Intact	2	4	4	4	2	4	4.00
72	Intact	2	-	-	-	4	4	-1.00
24	Abraded	4	4	4	4	4	4	4.00
72	Abraded	4	4	4	4	4	4	4.00

SUBTOTAL 16.00

TOTAL SCORE 32.00

(TOTAL /4) PRIM. IRIT. INDEX 8.00

CORROSIVE

Sodium Sesquicarbonate 24 hour exposure

Expos. Time Hrs.	ERYTHEMA	RABBIT NO.						Means
		14 M	15 M	16 M	32 F	33 F	34 F	
24	Intact	4	4	4	4	4	4	4.00
72	Intact	4	4	4	4	4	4	4.00
24	Abraded	4	4	4	4	4	4	4.00
72	Abraded	4	4	4	4	4	4	4.00

SUBTOTAL 16.00

	EDEMA							
		24	4	5	6	22	23	
24	Intact	4	4	4	4	4	4	4.00
72	Intact	4	4	4	4	4	4	4.00
24	Abraded	4	4	4	4	4	4	4.00
72	Abraded	4	4	4	4	4	4	4.00

SUBTOTAL 16.00

TOTAL SCORE 32.00

(TOTAL /4) PRIM. IRIT. INDEX 8.00

CORROSIVE

T-1866-20

Sodium Thiosulfate, Anhydrous 24 hour exposure

RABBIT NO.

Expos. Time Hrs.	ERYTHEMA	14 M Score	15 M Score	16 M Score	32 F Score	33 F Score	34 F Score	Means
24	Intact	0	0	0	0	1	0	0.17
72	Intact	0	0	0	0	0	0	0.00
24	Abraded	2	1	2	1	1	1	1.33
72	Abraded	0	0	0	0	0	0	0.00
							SUBTOTAL	1.50
	EDEMA							
24	Intact	0	0	0	0	0	0	0.00
72	Intact	0	0	0	0	0	0	0.00
24	Abraded	0	0	0	0	0	0	0.00
72	Abraded	0	0	0	0	0	0	0.00
							SUBTOTAL	0.00
							TOTAL SCORE	1.50
				(TOTAL /4)	PRIM. IRIT. INDEX			0.38
				MILD Irritant				

T-1866-21

Sodium Thiosulfate, Pentahydrate 24 hour exposure

RABBIT NO.

Expos.		14M	15M	16M	32F	33F	34F	
Time Hrs.	ERYTHEMA	Score	Score	Score	Score	Score	Score	Means
24	Intact	0	0	0	1	0	0	0.17
72	Intact	0	0	0	0	0	0	0.00
24	Abraded	2	1	2	1	1	1	1.33
72	Abraded	0	0	0	0	0	0	0.00

SUBTOTAL

		SUBTOTALS						
		EDEMA						
24	Intact	C	C	C	C	C	O	C.00
	Abraded	O	C	C	S	O	O	O.00
72	Intact	C	C	C	O	C	C	O.00
	Abraded	C	C	C	C	C	O	O.00

SUBTOTAL 0.00

TOTAL SCORE 1.50

(TOTAL /4) PRIM. IRIT. INDEX 0.38

Mild Irritant

T-1866-22

Sodium Trimetaphosphate 24 hour exposure

RABBIT NO.

T-1866-23

Tricalcium Phosphate 24 hour exposure

RABBIT NO.

Expos. Time Hrs.	ERYTHEMA	17M Score	18M Score	1M Score	35F Score	36F Score	19F Score	Means
24	Intact	0	0	0	0	0	0	0.00
72	Intact	0	0	0	0	0	0	0.00
24	Abraded	0	0	0	0	0	0	0.00
72	Abraded	0	0	0	0	0	0	0.00
							SUBTOTAL	0.00
	EDEMA							
24	Intact	0	0	0	0	0	0	0.00
72	Intact	0	0	0	0	0	0	0.00
24	Abraded	0	0	0	0	0	0	0.00
72	Abraded	0	0	0	0	0	0	0.00
							SUBTOTAL	0.00
							TOTAL SCORE	0.00
							(TOTAL /4) PRIM. IRIT. INDEX	0.00
							Non - Irritant	

T-1866-24

Trimagnesium Phosphate

24 hour EXPOSURE

RABBIT NO.

Expos. Time Hrs.	ERYTHEMA	7M Score	18M Score	1M Score	35F Score	36F Score	19F Score	Means
24	Intact	0	0	0	0	0	0	0.00
72	Intact	0	0	0	0	0	0	0.00
24	Abraded	0	0	0	0	0	0	0.00
72	Abraded	0	0	0	0	0	0	0.00
							SUBTOTAL	0.00
	EDEMA							
24	Intact	0	0	0	0	0	0	0.00
72	Intact	0	0	0	0	0	0	0.00
24	Abraded	0	0	0	0	0	0	0.00
72	Abraded	0	0	0	0	0	0	0.00
							SUBTOTAL	0.00
							TOTAL SCORE	0.00
							(TOTAL /4) PRIM. IRIT. INDEX	0.00
	Non-Irritant							

Zirconium Tetrachloride

4 hour exposure

RABBIT NO.

T-1866-25

Corrosive

Zirconium Tetrachloride RABBIT NO. 24 hair exposure
EXPOS.

RABBIT NO. 24 hair exposure

INSTRUCTIONS WRITE REPLY IN SPACE PROVIDED, WITH CARBON INTACT. SEPARATE, RETAIN PINK TRIPPLICATE.
TO RECIPIENT: CROSS OUT PLANT OR OFFICE AND RECIPIENT'S NAME ON LINE "TO", RETURN WHITE ORIGINAL TO SENDER.
→ NOTE: COMPLETE BY HANDWRITING, DO NOT TYPE:

TO:	OFFICE OR PLANT <u>Farmington</u>	PERSON <u>J. Eickenhorst</u>	DATE OF MESSAGE <u>2/13/86</u>
REPLY TO:	<u>Westport</u>	<u>D. Edminster</u>	INTEROFFICE MEMORANDUM
SUBJECT	<u>Copy of Tox Reports on Sodium Hexametaphosphate</u>		



MESSAGE

Joanna: Could you please send me a copy of the following Tox reports on Sodium Hexametaphosphate (including raw data):

T-1861

T- 4054

We do not have copies of these reports in our files and I need the information in order to develop an EEC label. This is rather a rush could you do it as soon as possible?

Thanx

SIGNED Donna Edminster

*Approved
KPS msl*

REPLY

Donna

Not much raw data available. What exists is enclosed.

DATE OF REPLY

2/19/86

SIGNED

Joanna

0005-000-00-A

THIS FORM IS USED TO EXPEDITE MATTERS THAT MIGHT BE DELAYED IN NORMAL OFFICE ROUTINE

Triage of 8(e) Submissions

Date sent to triage: _____

NON-CAP

CAP

Submission number: 12478A

TSCA Inventory:

Y N D

Study type (circle appropriate):

Group 1 - Dick Clements (1 copy total)

ECO AQUATO

Group 2 - Ernie Falke (1 copy total)

ATOX SBTOX SEN w/NEUR

Group 3 - Elizabeth Margosches (1 copy each)

STOX CTOX EPI RTOX GTOX
STOX/ONCO CTOX/ONCO IMMUNO CYTO NEUR

Other (FATE, EXPO, MET, etc.): _____

Notes:

THIS IS THE ORIGINAL 8(e) SUBMISSION; PLEASE REFILE AFTER TRIAGE DATABASE ENTRY

For Contractor Use Only

entire document: 0 1 2 pages 12 pages _____

Notes:

Contractor reviewer : JW Date: 1/17/96

CECATS\TRIAGE TRACKING DBASE ENTRY FORM

CECATS DATA:

Submission # 8EHO-

1092 - 12478 SEQ. A

TYPE: INT SUPP FLWP

SUBMITTER NAME: Rhone-Poulenc Inc.

SUB. DATE: 10/16/92

OTS DATE: 10/23/92

CSRAD DATE: 07/07/95

CHEMICAL NAME:INFORMATION REQUESTED: FLWP DATE:

- 0501 NO INFO REQUESTED
 0502 INFO REQUESTED (TECH)
 0503 INFO REQUESTED (VOL ACTIONS)
 0504 INFO REQUESTED (REPORTING RATIONALE)

DISPOSITION:

- (639) REFER TO CHEMICAL SCREENING
 (678) CAP NOTICE

OPTIONAL ACTIONS:

- (0401) NO ACTION REPORTED
 0402 STUDIES PLANNED/UNDERWAY
 0403 NOTIFICATION OF WORKERS/OTHERS
 0404 LABEL/MSDS CHANGES
 0405 PROCESS/HANDLING CHANGES
 0406 APP/USE DISCONTINUED
 0407 PRODUCTION DISCONTINUED
 0408 CONFIDENTIAL

CAS#

7446-70-0

16721-80-5

1344-09-8

10026-11-6

INFORMATION TYPE:P F CINFORMATION TYPE:

0201	ONCO (HUMAN)	01 02 04
0202	ONCO (ANIMAL)	01 02 04
0203	CELL TRANS (IN VITRO)	01 02 04
0204	MUTA (IN VITRO)	01 02 04
0205	MUTA (IN VIVO)	01 02 04
0206	REPRO/TERATO (HUMAN)	01 02 04
0207	REPRO/TERATO (ANIMAL)	01 02 04
0208	NEURO (HUMAN)	01 02 04
0209	NEURO (ANIMAL)	01 02 04
0210	ACUTE TOX. (HUMAN)	01 02 04
0211	CHR. TOX. (HUMAN)	01 02 04
0212	ACUTE TOX. (ANIMAL)	01 02 04
0213	SUB ACUTE TOX (ANIMAL)	01 02 04
0214	SUB CHRONIC TOX (ANIMAL)	01 02 04
0215	CHRONIC TOX (ANIMAL)	01 02 04

0216	EPICLIN
0217	HUMAN EXPOS (PROD CONTAM)
0218	HUMAN EXPOS (ACCIDENTAL)
0219	HUMAN EXPOS (MONITORING)
0220	BCO/AQUA TOX
0221	ENV. OCCC/REL/FATE
0223	EMER INCI OF ENV CONTAM
0223	RESPONSE REQUEST DELAY
0224	PROD/COMP/CHEM ID
0225	REPORTING RATIONALE
0226	CONFIDENTIAL
0227	ALLERG (HUMAN)
0228	ALLERG (ANIMAL)
0239	METAB/PHARMACO (ANIMAL)
0240	METAB/PHARMACO (HUMAN)

01 02 04	0241	IMMUNO (ANIMAL)
01 02 04	0242	IMMUNO (HUMAN)
01 02 04	0243	CHEM/PHYS PROP
01 02 04	0244	CLASTO (IN VITRO)
01 02 04	0245	CLASTO (ANIMAL)
01 02 04	0246	CLASTO (HUMAN)
01 02 04	0247	DNA DAM/REPAIR
01 02 04	0248	PROD/USE/PROC
01 02 04	0251	MSDS
01 02 04	0299	OTHER

P F C

01 02 04
01 02 04
01 02 04
01 02 04
01 02 04

TRIAGE DATA:

YES

NO

IN DRUGS

NON-CBI INVENTORY

YES (DROP/REFER)

NO (CONTINUE)

REFR

ONGOING REVIEW

RBT

REFR

SPECIESTOXICOLOGICAL CONCERN:

LOW Dermal Irritation

MED Dermal Irritation

HIGH Dermal Irritation

CAS SR

USE:

Industrial

PRODUCTION:

12478A

Aluminum Chloride, Sodium Orthosilicate, Sodium Sesquisilicate, Zirconium Tetrachloride

H

Dermal irritation is of high concern based on corrosive effects in 6/6 rabbits at both 4 and 24 hour exposures.

Sodium Hydrosulfide

H

Dermal irritation is of high concern based on corrosive effects in 5/6 and 2/6 rabbits at 4 and 24 hour exposures, respectively.

Disodium Phosphate, Sodium Acid Pyrophosphate

M

Dermal irritation is of medium concern based on moderate irritation in rabbits.

Sodium Hexametaphosphate, Aluminum Fluoride, Borax, Boric Acid, Boron Oxide, Dipotassium Phosphate, Ferric Orthophosphate, Insoluble Sodium Metaphosphate, Monosodium Phosphate, Potassium Silicate, Sodium Sulfite, Sodium Thiosulfate Anhydrous, Sodium Thiosulfate Pentahydrate

L

Dermal irritation is of low concern based on mild irritation in rabbits.

Dicalcium Phosphate, Sodium Gluconate, Sodium Hypophosphate, Sodium Trimetaphosphate, Tricalcium Phosphate, Trimagnesium Phosphate

L

Dermal irritation is of low concern based on no irritation in rabbits.